

Claims

1-14. (Cancelled)

15. (Currently Amended) A method for managing interactions between at least one peripheral command device and a terminal comprising at least one multimedia application exploiting the standard MPEG-4 for displaying a scene comprising MPEG-4 objects, said peripheral command device delivering to the terminal digital signals of user interactions as a function of actions of one or more users on said scene comprising:

constructing a first digital sequence having the form of a BIFS node (Binary Form for Scenes in accordance with the standard MPEG-4), wherein the first digital sequence is based on ~~a downstream~~ an interaction stream of raw data from the peripheral command device to the terminal and wherein said BIFS node comprises one or more updates based on the raw data to modify the scene and wherein the BIFS node further comprises at least a nature of action field and a parameter for action field to be applied to objects of said scene, said node specifying an association between said digital signals of user interactions and the scene objects, and

executing the first digital sequence at the terminal to reflect the one or more updates to modify the scene,

wherein the nature of action field defines at least one action to be applied to the scene with the parameter of action field, a value of the parameter for action field corresponds to a parameter of said digital signals received from the peripheral command device, and the BIFS node comprises a flag, the status of which enables or prevents the at least one action to be taken into account.

16. (Previously Presented) The method according to Claim 15, further comprising transferring said first digital sequence into a composition memory using a decoding sequence of

MPEG-4 systems to introduce the interaction data into a composition device for composing said scene.

17. (Previously Presented) The method according to Claim 16, wherein transferring is performed under control of a flow comprising at least one flow descriptor, itself transporting information required for configuration of the decoding sequence with an appropriate decoder.

18. (Previously Presented) The method according to Claim 15, wherein the BIFS node comprises a number of variable fields dependent on the form of peripheral command device, and transferring the interaction data of fields of the node to fields of objects of said scene is implemented by routes.

19. (Previously Presented) The method according to Claim 15, further comprising signalizing activity of the device.

20. (Cancelled)

21. (Previously Presented) The method according to Claim 15, wherein signal delivery is performed in the form of a flow indicated by a descriptor which contains information for configuring a decoding sequence with an appropriate decoder.

22. (Previously Presented) The method according to Claim 15, wherein constructing the interaction data sequence is performed in a decoding buffer memory of a multimedia application execution terminal.

23. (Previously Presented) The method according to Claim 15, wherein translation of the interaction data sequence is performed in a decoder equipped with an interface with a composition device for composing said scene similar to an ordinary BIFS decoder for executing the BIFS-Commands decoded on the scene.

24. (Previously Presented) The method according to Claim 15, wherein flow of user interactions passes through a DMIF client associated with the device that generates access units to be placed in a decoding buffer memory linked to a corresponding decoder.

25. (Previously Presented) The method according to Claim 15, wherein flow of user interactions enters into a corresponding decoder, either directly, or via an associated decoding buffer memory, thereby shortening the path taken by the user interaction flow.

26. (Currently Amended) Computer equipment comprising:

a calculator that executes a multimedia application at a terminal exploiting the standard MPEG-4, wherein the terminal provides a representation of a multimedia scene comprising MPEG-4 objects;

~~at least one peripheral device that represents a multimedia scene comprising MPEG-4 objects;~~

at least one peripheral command device that commands said application at the terminal by delivering digital signals of user interactions on said scene, the digital signals based on a corresponding ~~downstream~~ interaction stream of raw data from the at least one peripheral command device to the terminal;

an interface circuit at the terminal comprising an input circuit that receives said digital signals from said peripheral command device and an output circuit at the terminal that delivers a BIFS sequence having the form of a BIFS node; and

the BIFS node specifying an association between said digital signals of user interactions and the scene objects and comprising one or more updates based on the raw data to modify the scene and comprising at least a nature of action field and a parameter of action field defining at least one action to be applied to objects of said scene with the parameter of action field, wherein

a value of the parameter of action field corresponds to a parameter of said digital signals received from the peripheral command device,

wherein the BIFS node comprises a flag, the status of which enables or prevents the at least one action to be taken into account.

27. (Previously Presented) The computer equipment according to Claim 26, further comprising a user interaction decoder adapted to transform said digital signals of user interactions into BIFS sequence according to MPEG-4 Systems.

28. (Previously Presented) The computer equipment according to Claim 27, wherein said user interaction decoder transfers values of said digital signals produced by the peripheral command device into fields of said BIFS node.

29. (Previously Presented) The computer equipment according to Claim 28, further comprising route mechanisms adapted to propagate said values to target fields of objects composing said scene.

30. (Cancelled)

31. (New) The method of claim 15, wherein the BIFS node further comprises one or more fields that define a type and a number of interaction data to be applied to objects of said scene.

32. (New) The method of claim 15, further comprising:

constructing a second digital sequence comprised of at least one action to be applied to said scene and at least one parameter of the at least one action, wherein the parameter comprises a value corresponding to a variable from the peripheral device.